

# PATENT ABSTRACTS OF JAPAN

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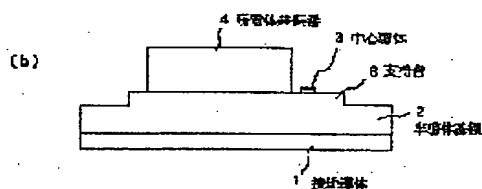
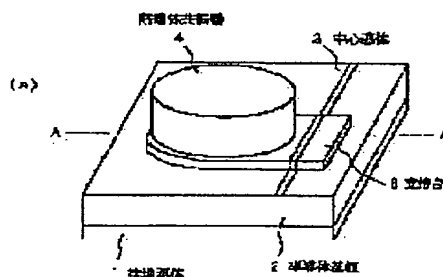
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### (54) MICROWAVE CIRCUIT

(57) Abstract:

**PROBLEM TO BE SOLVED:** To keep a dielectric resonator at a distance from a ground conductor without increasing the thickness of a substrate and without increasing the distances of a dielectric resonator and a central conductor in a direction vertical to a semiconductor substrate face and to suppress the deterioration of a non-load Q value while the increase of the thickness of the substrate and the deterioration of connection strength are avoided by placing the resonator and the central conductor on a supporting stand.

**SOLUTION:** A micro-strip line is constituted by the ground conductor 1, the semiconductor 2 and the central conductor 3. The supporting stand 6 has a part projecting from the dielectric resonator 4 and the central conductor 3 is formed at a part of it. In the supporting stand 6, the dielectric resonator 3 is fixed near the central conductor 3 with adhesive. Even if the height of the supporting stand 6 is raised for keeping the dielectric resonator 4 at a distance from the ground conductor 1 for suppressing the deterioration of the non-load Q value, the distances of the dielectric resonator 4 and the central conductor 3 in the direction vertical to the face of the semiconductor substrate 2 are prevented from increasing since the dielectric resonator 4 and the central conductor 3 are placed on the supporting stand 6.



## LEGAL STATUS

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